

REMARKS

As an initial matter, Applicants thank Examiner Yu for her time and her comments during a telephonic interview conducted on April 26, 2005, with the undersigned representative. The substance of the interview related to the rejection of claims 55 and 63 under 35 U.S.C. § 112, first paragraph, asserted in the Office Action dated November 19, 2004.

Claims 51, 55-58, and 63 are currently pending in the application. Applicants acknowledge and thank the Examiner for indicating that the subject matter of claims 51 and 56 is allowable. Reconsideration of pending claims 55, 57, 58, and 63 in the present application is respectfully requested in view of the following remarks.

REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH (WRITTEN DESCRIPTION)

The PTO rejects claims 55, 57, 58, and 63 under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. The PTO asserts that amendments to claims 55 and 63 introduced in the Amendment filed September 10, 2004, in response to the Office Action dated March 12, 2004, introduced new matter. Specifically, the PTO alleges that the specification lacks description of all features of a polynucleotide that is at least 90% identical to SEQ ID NO:20, and that encodes a polypeptide capable of dephosphorylating an activated MAP kinase, wherein the encoded polypeptide comprises the peptide sequence set forth in SEQ ID NO:16.

Applicants respectfully traverse this rejection and submit that, as disclosed in the specification and recited in the instant claims, the application reasonably conveys to a person skilled in the art that Applicants possessed the claimed invention at the time of filing. Applicants' invention is directed in pertinent part to an isolated polynucleotide that encodes a polypeptide capable of dephosphorylating an activated MAP-kinase, which polynucleotide comprises a sequence at least 90% identical to SEQ ID NO:20, wherein the polypeptide comprises an amino acid sequence VHCLAGISRS (SEQ ID NO:16), and to related compositions and methods.

The present specification describes a polynucleotide (SEQ ID NO:1) that encodes a dual-specificity phosphatase-16 (DSP-16) polypeptide (SEQ ID NO:2) and describes a

polynucleotide (SEQ ID NO:20) that encodes an alternate form DSP-16 polypeptide (SEQ ID NO:21) (*see, e.g.*, page 9, lines 12-19; page 9, lines 23 through page 10, line 2; page 16, lines 10-16). A DSP-16 alternate form polypeptide, or a variant of such a polypeptide, is capable of dephosphorylating both tyrosine and threonine/serine residues of phosphorylated substrates, which include MAP-kinases (*see, e.g.*, specification at page 10, lines 4-11).

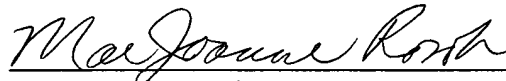
Also as described in the specification and recited in the instant claims, a DSP-16 alternate form polynucleotide may comprise a sequence variant that exhibits at least 90% identity to a polynucleotide sequence that encodes a native DSP-16 alternate form polypeptide (*see, e.g.*, specification at page 13, line 26 through page 14, line 6). DSP-16 alternate form polypeptide variants, encoded by the recited DSP-16 alternate form polynucleotide sequence variants, may contain one or more substitutions, deletions, additions and/or insertions such that the ability of a DSP-16 alternate form polypeptide variant to dephosphorylate tyrosine and threonine residues within a substrate is not substantially diminished (*see, e.g.*, specification at page 10, lines 11-21; page 13, line 26 through page 14, line 1). These DSP-16 alternate form polypeptide variants retain the catalytic active site domain (VHCLAGISRS, SEQ ID NO:16) found within the native (or wildtype) DSP-16 alternate form polypeptide sequence (*see, e.g.*, specification at page 12, lines 3-12; page 16, line 10-14). Accordingly, the present specification clearly describes a polynucleotide that encodes a polypeptide capable of dephosphorylating an activated MAP-kinase and that comprises a nucleotide sequence at least 90% identical to SEQ ID NO:20, wherein the encoded polypeptide comprises an amino acid sequence VHCLAGISRS (SEQ ID NO:16).

Applicants therefore submit that the Application complies with the written description requirement under 35 U.S.C. § 112, first paragraph, and request that this rejection be withdrawn.

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Applicants respectfully submit that all claims in the application are allowable. Favorable consideration and a Notice of Allowance are earnestly solicited. In the event that the Examiner believes a teleconference will facilitate prosecution of this matter, the Examiner is invited to telephone the undersigned.

Respectfully submitted,  
SEED Intellectual Property Law Group PLLC

A handwritten signature in cursive script, reading "Mae Joanne Rosok", written over a horizontal line.

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